

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1-7 (canceled):

Claim 8 (withdrawn): An image pickup apparatus comprising:

an image pickup unit including a plurality of photoelectric conversion units for picking up an image of an object; and

a filter, arranged on said image pickup unit, for reducing a light amount that causes a flicker.

Claim 9 (withdrawn): An image pickup apparatus comprising:

an image pickup unit including a plurality of photoelectric conversion units for picking up an image of an object; and

a silicon member, arranged on said image pickup unit, that has a thickness of 50 to 100 μm .

Claim 10 (withdrawn): An image pickup apparatus comprising:

an image pickup unit for picking up an image of an object;

a light source, arranged on a side face of said image pickup unit;

a light shielding unit, arranged on said side face of said image pickup unit, for shielding light emitted by said light source; and

a light guiding member, arranged on said side face of said image pickup unit, for guiding said light emitted by said light source.

Claim 11 (new): An image pickup apparatus for reading a fingerprint image comprising:
an image pickup unit for picking up an image of an object;
a detection circuit for detecting a flicker; and
a light source for irradiating the object with a light, wherein
the image pickup apparatus comprises further
a control unit for controlling, based on a result of a detection by the detection circuit, the
image pickup unit per each one period of the flicker so as not to accumulate photoelectric
charges during a period in which an amount of light that causes the flicker is a predetermined
value or smaller.

Claim 12 (new): The image pickup apparatus according to claim 11, wherein
a period of accumulating the photoelectric charges per each one pixel of the image pickup
unit is shorter than the one period of the flicker.

Claim 13 (new): An image pickup apparatus for reading a fingerprint image comprising:
an image pickup unit for picking up an image of an object;
a detection circuit for detecting a flicker; and
a light source for irradiating the object with a light, wherein
the image pickup apparatus comprises further
a control unit for controlling, based on a result of a detection by the detection circuit, the
light source per each one period of the flicker such that the light source is turned from non-light
emission state into a light emission state, or a quantity of light emission from the light source
increases at a timing when the amount of light that causes the flicker becomes a predetermined
value or smaller.

Claim 14 (new): The image pickup apparatus according to claim 13, wherein
a period of accumulating photoelectric charges per each one pixel of the image pickup unit is shorter than the one period of the flicker.

Claim 15 (new): An image pickup apparatus for reading a fingerprint image comprising:
an image pickup unit for picking up an image of an object;
a detection circuit for detecting a flicker; and
a light source for irradiating the object with a light, wherein
the image pickup apparatus comprises further
a control unit for controlling, based on a result of a detection by the detection circuit, the light source per each one period of the flicker such that the light source emits light during only a period in which the amount of light that causes the flicker is a predetermined value or smaller.

Claim 16 (new): The image pickup apparatus according to claim 15, wherein
a period of accumulating photoelectric charges per each one pixel of the image pickup unit is shorter than the one period of the flicker.

Claim 17 (new): An image pickup apparatus for reading a fingerprint image comprising:
an image pickup unit for picking up an image of an object;
a detection circuit for detecting a flicker; and
a light source for irradiating the object with a light, wherein
the image pickup apparatus comprises further
a control unit for controlling, based on a result of a detection by the detection circuit, the light source per each one period of the flicker such that a quantity of light emitted from the light source during a period in which the amount of light that causes the flicker is a predetermined

value or smaller is larger than a quantity of light emitted from the light source during a period in which the amount of light that causes the flicker is larger than the predetermined value.

Claim 18 (new): The image pickup apparatus according to claim 17, wherein
a period of accumulating photoelectric charges per each one pixel of the image pickup unit is shorter than the one period of the flicker.

Claim 19 (new): An image pickup apparatus for reading a fingerprint image comprising:
an image pickup unit for picking up an image of an object;
a detection circuit for detecting a flicker; and
a light source for irradiating the object with a light, wherein
the image pickup apparatus comprises further
a control unit for controlling, based on a result of a detection by the detection circuit, the image pickup unit per each one period of the flicker such that the one period of the flicker equals to a period of accumulating the photoelectric charges per each one pixel of the image pickup unit.